

WHAT IS CLAIMED:

1. A system for controlling the distribution and use of digital works comprising:

means for attaching one or more usage rights to a digital work, each of said one or more usage rights specifying a particular instance of how said digital work may be used or distributed, each of said usage rights capable of specifying a digital ticket, the possession of said digital ticket being a condition on the exercise of a right specifying said digital ticket;

a plurality of repositories for storing and exchanging digital works, each of said plurality of repositories comprising:

storage means for storing digital works, their attached usage rights, and digital tickets;

transaction processing means having a requester mode of operation for requesting access to a digital work, said request specifying a usage right, and a server mode of operation for processing requests to access said requested digital work based on said usage right specified in said request, the usage rights attached to said digital work, and digital tickets associated with said usage rights;

a generic ticket agent for punching digital tickets to indicate that an associated usage right has been exercised; and

a coupling means for coupling to another of said plurality of repositories across a communications medium.

2. The system as recited in Claim 1 wherein a usage right may specify a special ticket agent for punching a specified digital ticket and said system is further comprised of one or more authorization repositories containing special ticket agents for punching digital tickets.

3. The system as recited in Claim 1 wherein said digital ticket is comprised of a first timestamp part for indicating a time when said digital ticket was copied and a second timestamp part for indicating a time when said digital ticket was punched.

4. The system as recited in Claim 3 wherein said generic ticket agent is further comprised of a means for determining if a digital ticket is valid and timestamping means for timestamping digital tickets when they are punched.

5. The system as recited in Claim 4 wherein said means for determining if a digital ticket is valid is further comprised of a comparison means for comparing said first timestamp of said digital ticket with said second timestamp of said digital ticket so that if said first timestamp is later in time than said second timestamp, said digital ticket is determined to be valid.

6. In a computer controlled system for the distribution of digital works, a method for controlling access to digital works comprising the steps of:

- a) creating a digital work and a digital ticket for said digital work;
- b) attaching a usage right to said digital work, said usage right specifying said digital ticket;
- c) storing said digital work in a first repository;
- d) storing said digital ticket in a second repository;
- e) a third repository acquiring said digital ticket from said second repository;
- f) said third repository transmitting a request to access said digital work to said first repository, said request specifying said usage right;
- g) said first repository determining if said third repository has said digital ticket;
- h) said third repository presenting said digital ticket to said first repository;
- i) said first repository transmitting said digital work to said third repository; and
- j) said first repository punching said digital ticket.

7. The method as recited as in Claim 6 wherein said step of a third repository acquiring said digital ticket from said second repository is further comprised of the step of said third repository copying said digital ticket from said second repository for a fee.

8. The method as recited in Claim 7 wherein said digital ticket is comprised of a first timestamp part for storing a time when said digital ticket was copied and a second timestamp part for storing a timestamp when said digital ticket was punched and said step of copying said digital ticket from said second repository for a fee is further comprised of the step of said second repository marking said first timestamp part of said digital ticket with a copy timestamp indicating the time and date the copy of said digital ticket was made.

9. The method as recited in Claim 8 wherein said step of said first repository punching said digital ticket is further comprised of the step of said first repository marking said second timestamp part of said digital ticket with a punch timestamp indicating the time and date the digital ticket was punched.

10. The method as recited in Claim 9 wherein said method is further comprised of the step of said third repository refreshing said digital ticket to enable a subsequent reuse.

11. The method as recited in Claim 10 wherein said step of said third repository refreshing said digital ticket to enable a subsequent reuse is further comprised of the steps of:

- k) said third repository making a copy of said digital ticket for a fee: and
- l) said third repository marking said first timestamp part of said digital ticket with a copy timestamp indicating the time and date the digital ticket was refreshed.

12. In a computer controlled system for the distribution of digital works, a method for controlling the number of times that a usage right attached to a digital work may be exercised, said method comprising the steps of:

- a) creating a digital work;
- b) defining a usage right for said digital work, said usage right specifying a digital ticket indicating a predetermined number of times that said usage right may be exercised;
- c) creating said digital ticket with an indicator of said predetermined number;
- d) storing said digital work, said usage right and said digital ticket in a first repository;
- e) a second repository transmitting a request to access said digital work to said first repository, said request specifying said usage right;
- f) said first repository determining if said digital ticket for said usage right indicates that said usage right has been exercised said predetermined number of times;
- g) if said digital ticket indicates that said usage right has been exercised said predetermined number of times, said first repository denying access to said digital work;
- h) if said digital ticket indicates that said usage right has not been exercised said predetermined number of times, said first repository granting access to said digital work; and

- i) said first repository punching said digital ticket to indicate a instance of exercising said usage right.

13. In a computer controlled system for the distribution of digital works, a method for controlling the access to said digital works, said method comprising the steps of:

- a) creating a digital work and a digital ticket;
- b) defining a usage right for said digital work, said usage right specifying said digital ticket and a special ticket agent for punching said digital ticket;
- c) storing said digital work in a first repository;
- d) distributing said digital ticket to a second repository;
- e) said second repository transmitting a request to access said digital work to said first repository, said request specifying said usage right;
- f) said first repository determining if said second repository has said digital ticket;
- g) said second repository presenting said digital ticket to said first repository;
- h) said first repository presenting said digital ticket to said special ticket agent;
- i) said special ticket agent determining if said digital ticket is valid;
- j) if said digital ticket is invalid, said special ticket agent causing said request to access to be denied;

k) if said digital ticket is valid, said special ticket agent punching said digital ticket; and

l) said first repository granting access to said digital work by said second repository.

14. In a computer controlled system for the distribution of digital works, a method for distribution of upgrades to digital works, said method comprising the steps of:

a) creating a digital ticket, said digital ticket for permitting copying of an upgrade digital work;

b) distributing said digital ticket and a corresponding digital work to a first repository for a fee;

c) creating said upgrade digital work, said upgrade digital work having a copying right for permitting copying of said upgrade digital work to possessors of said digital ticket;

d) storing said upgrade digital work in a second repository;

e) said first repository transmitting a request to copy said digital work to said second repository;

f) said second repository determining if said first repository has said digital ticket;

g) said first repository presenting said digital ticket to said second repository;

i) said second repository determining if said digital ticket is valid;

- j) if said digital ticket is invalid, said second repository causing said request to copy to be denied;
- k) if said digital ticket is valid, said second repository punching said digital ticket; and
- l) said second repository transmitting said upgrade digital work to said first repository.

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